

RAW SEQUENCE LISTING

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Application Serial Number: 10/603,249

Source: _____

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/603,249

DATE: 10/18/2004

TIME: 09:25:35

Input Set : N:\Crif3\RULE60\10603249.raw.txt

Output Set: N:\CRF4\10182004\J603249.raw

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1 <110> APPLICANT: Van der Ploeg, Leonardus H.T.
2     Chen, Howard Y.
3     Chen, Airu S.
4 <120> TITLE OF INVENTION: MELANOCORTIN-3 RECEPTOR DEFICIENT CELLS
5     , NON-HUMAN TRANSGENIC ANIMALS AND METHODS OF SELECTING
6     COMPOUNDS WHICH REGULATE BODY WEIGHT
7 <130> FILE REFERENCE: 20561Y
8 <140> CURRENT APPLICATION NUMBER: US/10/603,249
9 <141> CURRENT FILING DATE: 2003-06-25
10 <150> PRIOR APPLICATION NUMBER: US/09/709,066
11 <151> PRIOR FILING DATE: 2000-11-09
12 <160> NUMBER OF SEQ ID NOS: 15
13 <170> SOFTWARE: FastSEQ for Windows Version 4.0
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 1675
17 <212> TYPE: DNA
18 <213> ORGANISM: Mus musculus (house mouse)
19 <400> SEQUENCE: 1
20     tctagactgg acagcatcca caagagaagc acctagaagg agaattttcc ccagcagctt      60
21     gctcaggacc ctgcaggagc cgcagctggg actggacctg ctgttaacca tgaactcttc      120
22     ctgctgcctg tcttctgttt ctccgatgct gcctaacctc tctgagcacc ctgcagcccc      180
23     tcttgccagc aaccggagcg gcagtgggtt ctgtgagcag gtcttcatca agccggagggt      240
24     ctctctggct ctgggcatcg tcagtctgat ggaaaacatc ctggtgatcc tggctgtggt      300
25     caggaatggc aacctgcact ctcccatgta cttcttctcg tgcagcctgg ctgcagccga      360
26     catgctggtg agcctgtcca actccttgga gaccatcatg atcgccgtga tcaacagcga      420
27     ctccctgacc ttggaggacc agtttatcca gcacatggat aatatcttcg actctatgat      480
28     ttgcatctcc ctgggggcct ccacttgcaa cctcctggcc attgccatcg acaggtacgt      540
29     caccatcttc tatgcccttc ggtaccacag catcatgaca gttaggaaag ccctcacctt      600
30     gatcgggggtc atctgggtct gctgcccgtc ctgcccgtg atgttcatca tctactccga      660
31     gagcaagatg gtcacgtgtg gtctcatcac catgttcttc gccatggtgc tctcatggg      720
32     caccctatat atccacatgt tctcttctgc caggctccac gtccagcgca tcgcagtgt      780
33     gccccctgct ggcgtggttg cccacagca gcaactctgc atgaaggggg ctgtcaccat      840
34     cactatcttg ctgggtgttt tcatcttctg ctgggcgcct ttcttctctc acctggtct      900
35     catcatcacc tgccccacca atccctactg catctgctac acggccatt tcaacaccta      960
36     cctggttctc atcatgtgca actccgtcat cgacccctc atctacgcct tccgcagcct      1020
37     ggagctgcgc aacacgttca aggagattct ctgcccgtgc aacagcatga acttgggcta      1080
38     ggatgcccgt ggaggtgttc cacatccagc caagagacaa aaacaacgct cagacgggac      1140
39     gtaaaagggg gttaggagct ggaactgtgc ttggcttcgt ctgtaagctc gtggcccttt      1200
40     gcagacggga caccggcgtg gatgggctgt ctgtgaggat ctgtgtgtgg gtaagtcatg      1260
41     ttgatctagc acatagcctg gaagaatcag gcaaagcagc cctgagtgtc atctgtgttc      1320
42     attgctaggg acccaggggt tgtggccctt gctgcttat tggctttgta ccagtaactg      1380
43     tgcttcaagc caaccagacc ggagggctct cgtgagcaga aagagtgtt agacttccgg      1440
44     caagcatcct ggctcacagc ggccacctcc tgaccactac cgggagagct ttgcacatat      1500

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45      tctgtgggag attgagtga ggcctgaaaa caatgtgata tttgctgctc ccttccagaa      1560
46      cttacatctg tgccagcctc cccgaacccc tgcacagaga catgaccccc ttctccctgt      1620
47      gccgttgtea tgggtgttat tattgttgga gttttgttcg ttaaaatcta agctt      1675
49 <210> SEQ ID NO: 2
50 <211> LENGTH: 323
51 <212> TYPE: PRT
52 <213> ORGANISM: Mus musculus (house mouse)
53 <400> SEQUENCE: 2
54      Met Asn Ser Ser Cys Cys Leu Ser Ser Val Ser Pro Met Leu Pro Asn
55      1          5          10          15
56      Leu Ser Glu His Pro Ala Ala Pro Pro Ala Ser Asn Arg Ser Gly Ser
57      20          25          30
58      Gly Phe Cys Glu Gln Val Phe Ile Lys Pro Glu Val Phe Leu Ala Leu
59      35          40          45
60      Gly Ile Val Ser Leu Met Glu Asn Ile Leu Val Ile Leu Ala Val Val
61      50          55          60
62      Arg Asn Gly Asn Leu His Ser Pro Met Tyr Phe Phe Leu Cys Ser Leu
63      65          70          75          80
64      Ala Ala Ala Asp Met Leu Val Ser Leu Ser Asn Ser Leu Glu Thr Ile
65      85          90          95
66      Met Ile Ala Val Ile Asn Ser Asp Ser Leu Thr Leu Glu Asp Gln Phe
67      100         105         110
68      Ile Gln His Met Asp Asn Ile Phe Asp Ser Met Ile Cys Ile Ser Leu
69      115         120         125
70      Val Ala Ser Ile Cys Asn Leu Leu Ala Ile Ala Ile Asp Arg Tyr Val
71      130         135         140
72      Thr Ile Phe Tyr Ala Leu Arg Tyr His Ser Ile Met Thr Val Arg Lys
73      145         150         155         160
74      Ala Leu Thr Leu Ile Gly Val Ile Trp Val Cys Cys Gly Ile Cys Gly
75      165         170         175
76      Val Met Phe Ile Ile Tyr Ser Glu Ser Lys Met Val Ile Val Cys Leu
77      180         185         190
78      Ile Thr Met Phe Phe Ala Met Val Leu Leu Met Gly Thr Leu Tyr Ile
79      195         200         205
80      His Met Phe Leu Phe Ala Arg Leu His Val Gln Arg Ile Ala Val Leu
81      210         215         220
82      Pro Pro Ala Gly Val Val Ala Pro Gln Gln His Ser Cys Met Lys Gly
83      225         230         235         240
84      Ala Val Thr Ile Thr Ile Leu Leu Gly Val Phe Ile Phe Cys Trp Ala
85      245         250         255
86      Pro Phe Phe Leu His Leu Val Leu Ile Ile Thr Cys Pro Thr Asn Pro
87      260         265         270
88      Tyr Cys Ile Cys Tyr Thr Ala His Phe Asn Thr Tyr Leu Val Leu Ile
89      275         280         285
90      Met Cys Asn Ser Val Ile Asp Pro Leu Ile Tyr Ala Phe Arg Ser Leu
91      290         295         300
92      Glu Leu Arg Asn Thr Phe Lys Glu Ile Leu Cys Gly Cys Asn Ser Met
93      305         310         315         320
94      Asn Leu Gly

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96 <210> SEQ ID NO: 3
97 <211> LENGTH: 1080
98 <212> TYPE: DNA
99 <213> ORGANISM: Homo sapien
100 <400> SEQUENCE: 3
101   atgagcatcc aaaagaagta tctggaggga gattttgtct ttctgtgag cagcagcagc      60
102   ttctacgga ccctgctgga gcccagctc ggatcagccc ttctgacagc aatgaatgct      120
103   tcgtgctgcc tgccctctgt tcagccaaca ctgcctaata gctcggagca cctccaagcc      180
104   cctttcttca gcaaccagag cagcagcgcc ttctgtgagc aggtcttcat caagcccagag      240
105   attttcctgt ctctgggcat cgtcagctct ctggaaaaca tcttggttat cctggccgtg      300
106   gtcaggaacg gcaacctgca ctccccgat tacttcttct tctgcagcct ggcggtggcc      360
107   gacatgctgg taagtgtgtc caatgccctg gagaccatca tgatcgccat cgtccacagc      420
108   gactacctga ccttcgagga ccagtttatc cagcacatgg acaacatctt cgactccatg      480
109   atctgcatct ccctgggtggc ctccatctgc aacctcctgg ccatacgccg cgacaggtac      540
110   gtcaccatct tttacgcgct ccgctaccac agcatcatga ccgtgaggaa ggccctcacc      600
111   ttgatcgtgg ccactctgggt ctgctgcgcc gtctgtggcg tgggtgttcat cgtctactcg      660
112   gagagcaaaa tggtcattgt gtgcctcacc accatgttct tcgccatgat gctcctcatg      720
113   ggcaccctct acgtgcacat gttcctcttt gcgcggtgct acgtcaagcg catagcagca      780
114   ctgccacctg ccgacggggg ggccccacag caacactcat gcatgaaggg ggcagtcacc      840
115   atcaccattc tcttgggcgt gttcatcttc tgctgggccc ccttcttctt ccacctggtc      900
116   ctcatcatca cctgccccac caaccctac tgcactgctt acactgcccc cttcaacacc      960
117   tacctgggtc tcactcatgt caactccgtc atcgaccacac tcactctacgc tttccggagc     1020
118   ctggaattgc gcaacacctt tagggagatt ctctgtggct gcaacggcat gaacttggga     1080
120 <210> SEQ ID NO: 4
121 <211> LENGTH: 360
122 <212> TYPE: PRT
123 <213> ORGANISM: Homo sapien
124 <400> SEQUENCE: 4
125   Met Ser Ile Gln Lys Lys Tyr Leu Glu Gly Asp Phe Val Phe Pro Val
126       1             5             10             15
127   Ser Ser Ser Ser Phe Leu Arg Thr Leu Leu Glu Pro Gln Leu Gly Ser
128             20             25             30
129   Ala Leu Leu Thr Ala Met Asn Ala Ser Cys Cys Leu Pro Ser Val Gln
130             35             40             45
131   Pro Thr Leu Pro Asn Gly Ser Glu His Leu Gln Ala Pro Phe Phe Ser
132             50             55             60
133   Asn Gln Ser Ser Ser Ala Phe Cys Glu Gln Val Phe Ile Lys Pro Glu
134             65             70             75             80
135   Ile Phe Leu Ser Leu Gly Ile Val Ser Leu Leu Glu Asn Ile Leu Val
136             85             90             95
137   Ile Leu Ala Val Val Arg Asn Gly Asn Leu His Ser Pro Met Tyr Phe
138             100            105            110
139   Phe Leu Cys Ser Leu Ala Val Ala Asp Met Leu Val Ser Val Ser Asn
140             115            120            125
141   Ala Leu Glu Thr Ile Met Ile Ala Ile Val His Ser Asp Tyr Leu Thr
142             130            135            140
143   Phe Glu Asp Gln Phe Ile Gln His Met Asp Asn Ile Phe Asp Ser Met
144             145            150            155            160
145   Ile Cys Ile Ser Leu Val Ala Ser Ile Cys Asn Leu Leu Ala Ile Ala

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146                               165                               170                               175
147      Val Asp Arg Tyr Val Thr Ile Phe Tyr Ala Leu Arg Tyr His Ser Ile
148                               180                               185                               190
149      Met Thr Val Arg Lys Ala Leu Thr Leu Ile Val Ala Ile Trp Val Cys
150                               195                               200                               205
151      Cys Gly Val Cys Gly Val Val Phe Ile Val Tyr Ser Glu Ser Lys Met
152      210                               215                               220
153      Val Ile Val Cys Leu Ile Thr Met Phe Phe Ala Met Met Leu Leu Met
154      225                               230                               235                               240
155      Gly Thr Leu Tyr Val His Met Phe Leu Phe Ala Arg Leu His Val Lys
156                               245                               250                               255
157      Arg Ile Ala Ala Leu Pro Pro Ala Asp Gly Val Ala Pro Gln Gln His
158                               260                               265                               270
159      Ser Cys Met Lys Gly Ala Val Thr Ile Thr Ile Leu Leu Gly Val Phe
160      275                               280                               285
161      Ile Phe Cys Trp Ala Pro Phe Phe Leu His Leu Val Leu Ile Ile Thr
162      290                               295                               300
163      Cys Pro Thr Asn Pro Tyr Cys Ile Cys Tyr Thr Ala His Phe Asn Thr
164      305                               310                               315                               320
165      Tyr Leu Val Leu Ile Met Cys Asn Ser Val Ile Asp Pro Leu Ile Tyr
166                               325                               330                               335
167      Ala Phe Arg Ser Leu Glu Leu Arg Asn Thr Phe Arg Glu Ile Leu Cys
168      340                               345                               350
169      Gly Cys Asn Gly Met Asn Leu Gly
170      355                               360

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172 <210> SEQ ID NO: 5

173 <211> LENGTH: 28

174 <212> TYPE: DNA

175 <213> ORGANISM: Artificial Sequence

176 <220> FEATURE:

177 <223> OTHER INFORMATION: oligonucleotide

178 <400> SEQUENCE: 5

179 gatgagagaa gactggagag agagggtc

28

181 <210> SEQ ID NO: 6

182 <211> LENGTH: 27

183 <212> TYPE: DNA

184 <213> ORGANISM: Artificial Sequence

185 <220> FEATURE:

186 <223> OTHER INFORMATION: oligonucleotide

187 <400> SEQUENCE: 6

188 gaagaagtac atgggagagt gcaggtt

27

190 <210> SEQ ID NO: 7

191 <211> LENGTH: 27

192 <212> TYPE: DNA

193 <213> ORGANISM: Artificial Sequence

194 <220> FEATURE:

195 <223> OTHER INFORMATION: oligonucleotide

196 <400> SEQUENCE: 7

197 gatgagagaa gactggagga gagggtc

27

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Input Set : N:\CrF3\RULE60\10603249.raw.txt

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199 <210> SEQ ID NO: 8
200 <211> LENGTH: 24
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial Sequence
203 <220> FEATURE:
204 <223> OTHER INFORMATION: oligonucleotide
205 <400> SEQUENCE: 8
206      taccggtgga tgtggaatgt gtgc                                24
208 <210> SEQ ID NO: 9
209 <211> LENGTH: 45
210 <212> TYPE: DNA
211 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: oligonucleotide
214 <400> SEQUENCE: 9
215      agccaggatc accaggatgt ttccatcag actgacgatg cccag          45
217 <210> SEQ ID NO: 10
218 <211> LENGTH: 45
219 <212> TYPE: DNA
220 <213> ORGANISM: Artificial Sequence
221 <220> FEATURE:
222 <223> OTHER INFORMATION: oligonucleotide
223 <400> SEQUENCE: 10
224      tgcccatgag gaggaccatg gcgaagaaca tggatgatgag gcaca          45
226 <210> SEQ ID NO: 11
227 <211> LENGTH: 45
228 <212> TYPE: DNA
229 <213> ORGANISM: Artificial Sequence
230 <220> FEATURE:
231 <223> OTHER INFORMATION: oligonucleotide
232 <400> SEQUENCE: 11
233      atgatgagga ccagggtggag gaagaaaggc gcccagcaga agatg          45
235 <210> SEQ ID NO: 12
236 <211> LENGTH: 25
237 <212> TYPE: DNA
238 <213> ORGANISM: Artificial Sequence
239 <220> FEATURE:
240 <223> OTHER INFORMATION: oligonucleotide
241 <400> SEQUENCE: 12
242      ctaaccataa gaaatcagca gcccg                                25
244 <210> SEQ ID NO: 13
245 <211> LENGTH: 25
246 <212> TYPE: DNA
247 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: oligonucleotide
250 <400> SEQUENCE: 13
251      agggaagtat acatgccatg gtggt                                25
253 <210> SEQ ID NO: 14

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VERIFICATION SUMMARY

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